Newsletter of the National Biological Information Infrastructure

nbii Access

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Search Ends for New NBII Search Engine …Implementation Begins

In the fall 2008 issue of *Access* we said a new and improved search engine was coming to the NBII. Now – drum roll – we're most pleased to say, "It's here!"

The contract to implement the NBII's new search engine was awarded on February 19, 2009 to Vivísimo, a Pittsburgh-based search software company founded in 2000 that is emerging as an industry leader. An example of a Vivisimo implementation is available on FirstGov.gov, the official Web portal of the U.S. government.

"It's safe to say we can now offer our users one of the most advanced search engines available on any biodiversity Web site," said Jim Erwin, coordinator of the NBII Search Engine Evaluation team.

Our New Search Engine Needs a Name!
Details inside (see page 2).

The new search engine will offer many advantages over the NBII's existing search function. Here are a few examples of new capabilities that will be available:

• The search interface is easy to use.

(Continued on page 2)

Protected Areas Database for the United States Now Available

The U.S. Geological Survey (USGS) NBII Gap Analysis Program (GAP) and the Doris Duke Charitable Foundation (DDCF) have joined forces to design the most collaborative and current protected areas database of our nation (PAD-US).

The vision of this group, the PAD-US Partnership, is to provide guidance and resources to maintain protected lands data with greater accuracy and detail than was previously possible. The Partnership defines protected areas as "lands dedicated to the preservation of biological diversity and to other natural, recreational, and cultural uses managed for these purposes through legal or other effective means" and includes the USGS, Bureau of Land Management, U.S. Forest Service, Conservation Biology Institute, GreenInfo Network, and The Nature Conservancy (TNC).

In April 2009, GAP aggregated the first version of the Protected Areas Database of the United States (PAD-Usv1) on behalf of the PAD-US Partnership. These data are required to fulfill GAP's mission to provide state, regional, and national assessments of the conservation status of native vertebrate species and natural land cover types and to facilitate the application of this information to land management activities.

To fulfill the NBII mission to facilitate the widest possible access to and use of biological data and information, GAP worked with the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC) to link PAD-US to the World Database on Protected Areas

(Continued on page 6)

In This Issue

NBII Search Engine (continued from page 1)

What's more, the search results arrive preorganized in a variety of groups created on the fly (clustered), which allows users to focus on particular categories or browse through related fields, thus avoiding a common "overload" problem of sorting through too many results.

> The search is set up to cast a wide net.

• The search is set up to cast a wide net. When a user executes a search, the search engine has been customized to crawl – simultaneously – 35 key repositories of biodiversity data and information (this number will grow). Results arrive from all of those sources in one search. The repositories – which include Web sites, databases, and federated resources – have been painstakingly selected from those offered by governments (federal, state, and local), nonprofits, the private sector, educational institutions, and more.

• Users can do a basic search by putting keywords in the search box (located in the NBII home page banner) or an advanced search with metadata fields. They can also specify how many results they want to come back.

• The search engine will also be integrated with Google Maps. For instance, if you're looking for species records that are geospatially referenced, you'll soon be able to display that information on the appropriate map.

• Users can search for images. The images come back as thumbnails. Just click on a thumbnail to open it up and examine it further. You can also search information associated with an image.

And the list of benefits goes on and on.

"Choosing and customizing this search engine has been a long, exhaustive process that we expect to conclude by July 15," said Erwin. "But we really feel like all the effort is worth it – and we're sure our users will agree."

What's In a Name?

Despite what Juliet once cooed to her Romeo about roses and such, a name can make quite a difference. Can you imagine Catherine Jones without the "Zeta"? Or Eldrick Woods (his real name) without the "Tiger"? Hardly.

The NBII wants to bring the same kind of sizzle to the name for its new search engine. And who better to handle this formidable undertaking than you, our loyal customers?

As you may know, the first NBII search engine was called BioBot. Our most recent search engine was Google Custom Search. Now it's time to turn the page and craft just the right name to christen our latest and, we think, greatest search engine.

Send your favorite idea(s) to the *Access* editor, Ron Sepic, at <ron_sepic@usgs.gov> no later than **July 1, 2009.** Ron will collect the entries and forward them to Gladys Cotter, the USGS Associate Chief Biologist for Information – who also oversees NBII development – for the final selection.

Once we have a winner, we'll have a kickoff party and officially launch the search engine under its newly minted name. The winner will receive an NBII search engine present. Plus, if the winner is in the Reston, VA, area, he/she will also get the first piece of a special cake prepared for the occasion and will be featured in a photo with Gladys to run in a future issue of *Access*. If the winner isn't in the Reston area, we of course will still be pleased to announce him/her in *Access*.

So conjure up those creative juices. We look forward to hearing from you!

nbii Access

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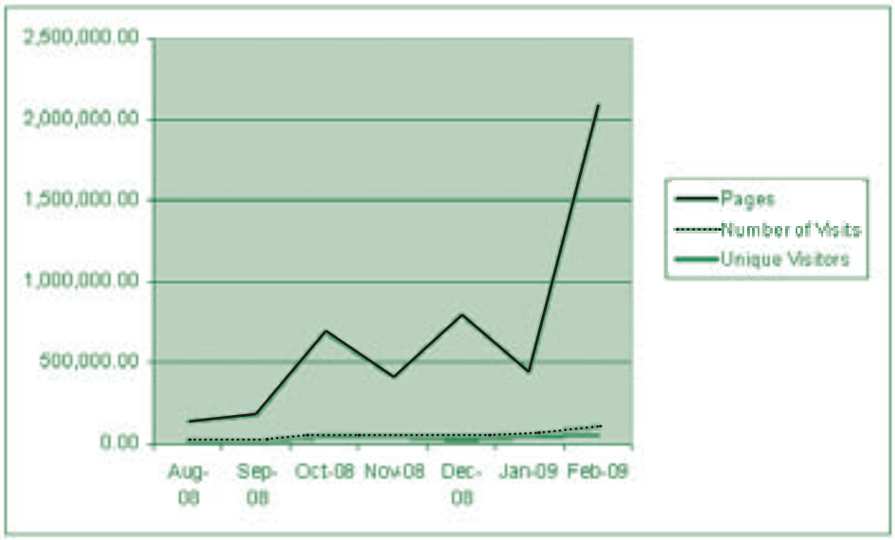
Visit the NBII Home Page at <www.nbii.gov>.

The User Focus Working Group: Working to Better Understand NBII Users

The NBII has always been committed to providing the best possible service to its diverse user audiences. Node managers track stakeholder information needs in specific regions and thematic areas, strategic plans are developed based on stakeholder needs, NBII Web sites are tested and reviewed, and NBII representatives attend professional events to showcase NBII services and collect user opinions. However, because of the decentralized NBII structure, knowledge about NBII user groups has been spread among different nodes and projects, and there has been no centralized approach to monitoring the NBII user base. The NBII User Focus Working Group was created in October 2008 to devise such an approach.



The number of pages viewed on the NBII Web site during January-February 2009 increased exponentially compared to the minimal increase in visits and unique visitors. Is this due to the active Web development processes on the site? Excluding internal traffic will help answer this question.

For a largely Web-based system such as the NBII, Web metrics are natural sources for data on usage and users. The User Focus group has been reviewing Web statistics packages used in the NBII and assessing their ability to provide meaningful and comparable data. One of these programs, Advanced Web Statistics, known as AWStats, is used at the Center for Bioinformatics (CBI). A close examination of currently available AW Stats data showed that for the purposes of user analysis and content management, the data needs to be triaged by filtering out internal traffic generated by NBII staff and partners working on the Web site. The User Focus group has been working with CBI IT staff to eliminate internal IP addresses for one configuration of AW Stats for the Web site, which should provide more accurate information on the number of pages viewed, the average time spent on the Web site, the search terms used, and other quantitative data for user analysis.

During initial discussions of the User Focus group, which includes representatives of NBII content leads and node management communities, the very notion of the NBII user has been revisited. It was recognized that the NBII user base goes far beyond the users of the NBII Web site. The Web site represents a gateway to the universe of NBII-sponsored resources, the overwhelming majority of which reside outside the portal. It was observed that users of NBII's specialized products and services often access the NBII-supported resources directly, bypassing the Web site. These users are not calculated into the AWStats reports for the Web site, but they need to be monitored separately through the Web analytics packages available on the servers that host these Web sites.

The User Focus group has also been working to describe NBII audiences in a way that would bring together the knowledge and assumptions about users and their tasks within different NBII nodes and projects, using a format that would be equally understandable for designers, developers, node managers, content leads, and management. Such a format is called a persona, and it has been extensively used in the practice of user-centric interface design. An online persona is modeled on a fictitious person that is the most probable representative of a certain user group. It leverages demographic and psychographic data to understand who is visiting (or should be visiting) your site and what information is most important to that visitor. As of today, four personas have been developed to reflect the target audiences of the NBII in specific terms: a scientist/researcher, conservation planner, citizen scientist, and agency program administrator.

Task-oriented personas and meaningful Web metrics are not the only methods the User Focus group intends to use to create a picture of NBII users. Expanding platforms to engage in direct dialog with users, including Web 2.0 platforms, Web surveys, usability testing, and an analysis of Q&A are among the next areas the group is going to focus on in the future.

Training Prepares Visitors from South Africa and Rwanda to Open the First WDC in Africa

From February 23 to March 6, 2009, the NBII conducted a biological informatics infrastructure training course for eleven participants from South Africa and Rwanda at the U.S. Geological Survey (USGS) National Headquarters in Reston, VA. The primary objective of the training was to provide participants with the data, information, and technical knowledge needed to begin to develop and implement the first World Data Center (WDC) in Africa, the International Council for Science's (ICSU) sponsored World Data Center for Biodiversity and Human Health (WDC-BHH).

Participants included experts in biodiversity and informatics from the following organizations: South African National Research Foundation (NRF; host for the new WDC-BHH), South African Environmental Observation Network (SAEON/NRF), University of Pretoria, South African Council for Scientific and Industrial Research (CSIR), University of Rwanda, Dian Fossey Gorilla Fund International, and Rwandan Institute of Scientific and Technological Research.

The first week of training was designed to expose participants to a wide range of topics, including informatics, spatial data management, biodiversity, ecology, and wildlife/human health. Presentations were made by representatives from a variety of organizations, including the NBII. Among the presenters was Roger Sayre from the USGS's Geographic Analysis and Monitoring Program (GAM), who presented some of the latest geospatial data sets of the African continent as well as a new initiative to map the ecosystems of all of Africa. Another presenter was Cris Marsh of the NBII Wildlife Disease Information Node, who offered an in-depth look at obtaining and making available national and global wildlife and zoonotic disease information.

Mark Becker of Columbia University's Center for International Earth Science Information Network's (CIESIN) WDC for Human Interactions in the Environment introduced participants to a wide array of Africa-specific geospatial and associated human health data and initiatives. During one of the two course-associated field trips, participants visited the National Library of Congress, where they received a behind-the-scenes tour that included observing the latest document digitization techniques and east African collections.

Additional technical subjects covered during the first week of

(Continued on page 5)

Participants in the biological informatics infrastructure training course, including trainees from South Africa and Rwanda and the metadata instructors.

Training Prepares Visitors (continued from page 4)

training included: biological informatics; infrastructure design, maintenance, and support; data standards, collection, processing, integration, and security; biodiversity; ecology; conservation management; pollinators; and invasive species. These additional topics were presented by experts from the following organizations: NBII (i.e., Invasive Species Information and Infrastructure Nodes and Digital Image Library), Gap Analysis Program, Integrated Taxonomic Information System, WDC for Biodiversity and Ecology (hosted by the NBII); Smithsonian Institution; Encyclopedia of Life; Catalog of Life; and Barcode of Life.

The second week of training included a three-day hands-on workshop on metadata standards and creation, including a train-the-trainer component, which was conducted by experts from the NBII and the National Oceanic and Atmospheric Administration (NOAA).

According to participants, the experience was invaluable, particularly in relation to lessons learned in the execution of biological informatics programs. As stated by Heila Pienaar of the University of Pretoria, "Although I've had a good grasp of data management, I still experienced specific gaps in terms of implementation. The two-week training course at the USGS filled those gaps very adequately."

For more information on the WDC-BHH or the informatics training, contact Christine Fournier <cfournie@usgs.gov> or Thomas Hermann <thomas_hermann@usgs.gov>.

Metadata Goes Global

To promote the establishment of a World Data Center in Africa, the NBII hosted participants from South Africa and Rwanda in Reston, VA, for two weeks of informatics training. A significant piece of launching a data-oriented infrastructure is the establishment of a metadata program. Metadata is a critical component for not only describing and documenting data sets, but is a significant driver in an organization's ability to share data efficiently.

An "Introduction to Metadata" workshop was presented by Viv Hutchison (USGS-NBII) on the first of three days devoted to the topic of metadata. Participants were introduced to the concept of metadata, its value, the Federal Geographic Data Committee (FGDC), and the NBII Biological Data Profile. In addition, participants learned about the history of metadata, how profiles and extensions add to the standard, how to write good metadata records, and how to implement a metadata program in an organization. Finally, the participants spent time creating a metadata record using Metavist software. This hands-on experience will empower the South African and Rwandan participants to create their own metadata records once they return to their offices.

On the following two days, fresh with new skills in metadata production, the participants engaged in a "Train the Trainer" course taught by Viv Hutchison and Kathy Martinolich (NOAA). The workshop focused on building the skills necessary to teach metadata to audiences of their own. After a day of instruction on how to construct solid lesson plans and presentation skills, the participants were asked to create their own lesson plans and present them to their peers. Each person was allowed 10 minutes. The presentation was then followed up by constructive criticism from the class and the instructors.

These metadata workshops are a product of the NBII's Metadata Program, which takes a broad approach to the collection and production of metadata. The NBII maintains a Metadata Clearinghouse that contains over 46,000 records – all of which use the FGDC Content Standard for Digital Geospatial Metadata format, and the majority of which contain the Biological Data Profile (BDP).

The BDP was designed by the NBII as a set of extended elements to the FGDC Standard that allow biologists to include information about their research, such as taxonomy, methodology, and analytical tools in their metadata records. The use of the standard is a requirement of federal agencies, thus the need for metadata workshops to teach scientists and data managers how to produce records.

Once records are in production, the NBII also offers a quality control service to record creation assistance. The participants from South Africa and Rwanda will have access to all of the tools provided by the NBII Metadata Program as they embark on creating a program of their own.

If you are interested in learning more about the NBII Metadata Program or how your organization might engage in some of the activities mentioned in this article, please contact Viv Hutchison (<vhutchison@usgs.gov> or 206-526-6282 x329) for more information.

Protected Areas Database (continued from page 1)

(WDPA). In addition, the PAD-US database will be submitted annually to the Commission for Environmental Cooperation (CEC.org) for integration into the North American Environmental Atlas. These linkages will facilitate collaboration among conservation organizations and land managers by establishing a consistent understanding of protected lands status whether the focus is global or local.

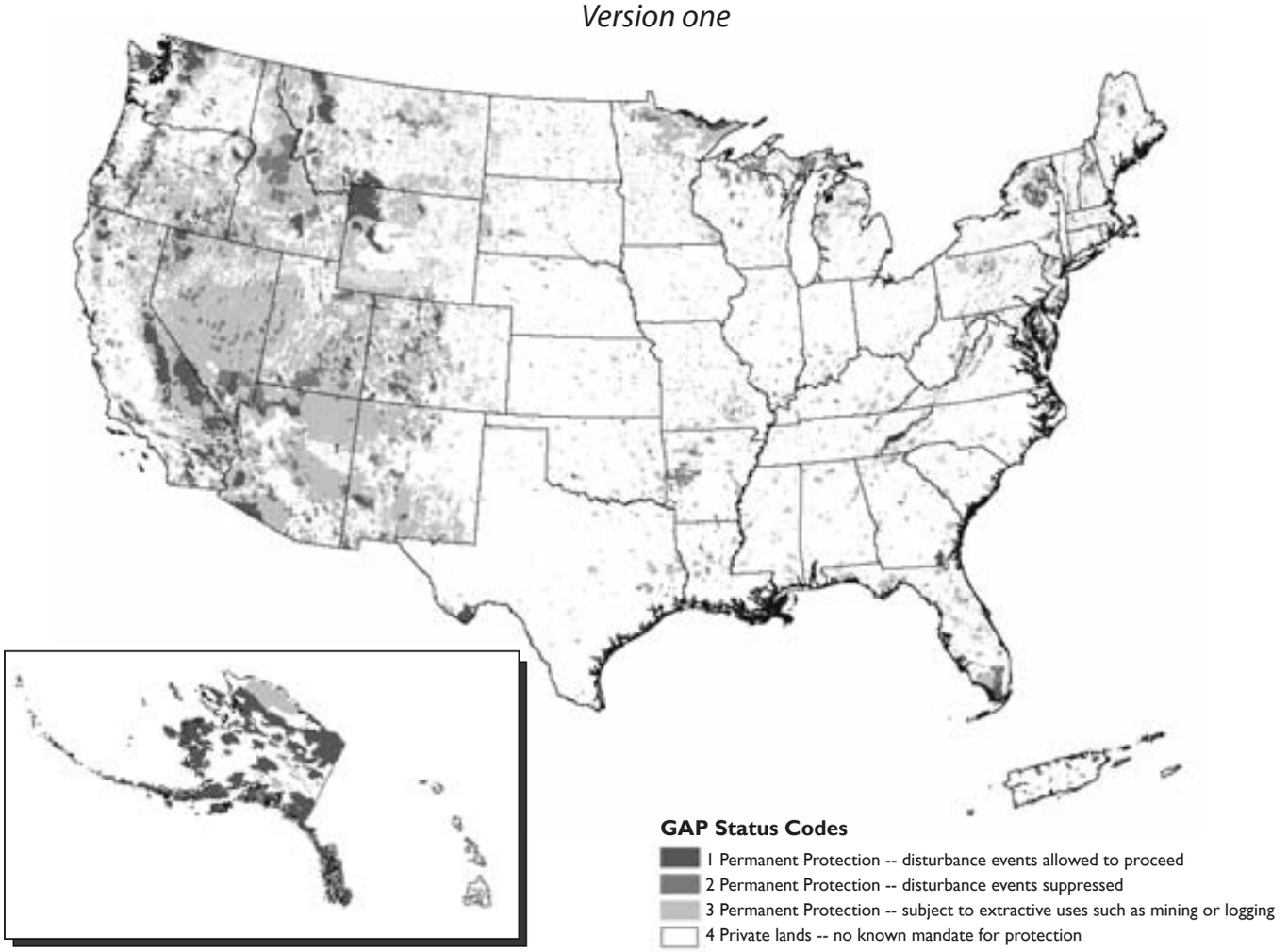
PAD-US is a geodatabase that combines administrative boundaries with attributes of ownership, management, and conservation measures. Available information includes: geographic boundaries of public land ownership and voluntarily provided private conservation lands (e.g., TNC preserves); a combination of land owner, manager, management designation, parcel name, and source of geographic information of each mapped land unit; International Union for Conservation of Nature category <http://www.unep-wcmc.org/protected_areas/categories/index.html>; and GAP Status Codes intended to provide a measurement of management commitment for long-term biodiversity protection. GAP categorizes protected areas (see PAD-US map on this page) as:

- Status Code 1: lands managed solely for biodiversity conservation in perpetuity
- Status Code 2: lands managed primarily for biodiversity conservation with some management (e.g., suppression of wildfire or activities designed to mimic natural disturbances)

(Continued on page 7)

Protected Areas Database of the United States (PAD-US)

Version one



Protected Areas Database (continued from page 6)

- Status Code 3: lands having permanent protection from natural land cover conversion, but are subject to extractive uses (e.g., logging or mining)
- Status Code 4: lands not managed for conservation or for which there is no information

Protected areas are both uniquely and uniformly identified in the geodatabase by standardized parcel names and coded management designations. In addition, a parcel's contextual setting is maintained through standardized attributes such as "Class" (Federal, Tribal, City, or Private) and "State Name."

Updates in several northwestern states (Washington, Oregon, Idaho, Wyoming, Montana, and California) are underway in addition to additional outreach and collaboration with data partners.

The mission of GAP <gapanalysis.nbii.gov> includes promoting conservation by providing broad geographic information on biological diversity to resource managers, planners, and policy makers who can use the information to make informed decisions. As part of the NBII <www.nbii.gov> — a collaborative program to provide increased access to data and information on the nation's biological resources — GAP data and analytical tools have been used in hundreds of applications, from basic research to comprehensive state wildlife plans, and from education projects in schools to ecoregional assessments of biodiversity.

GAP has developed protected areas information since the late 1980s. PAD-US demonstrates the collaborative efforts of the PAD-US Partnership to share data and leverage resources. PAD-US will be continually updated and improved.

For more information, see <http://gapanalysis.nbii.gov/PADUS> or contact John Mosesso, Gap Analysis Program Manager, at <john_mosesso@usgs.gov>.

The NBII's Digital Image Library Comes to *LIFE*!

We are pleased to announce the NBII Library of Images From the Environment, or LIFE, coming this spring! This past year has seen an intense effort by NBII staff and volunteers to redesign the current Digital Image Library (DIL) <http://images.nbii.gov> to better meet the needs of NBII users. The new NBII LIFE <http://life.nbii.gov> will greatly improve how the NBII's image library meets its six main goals:

- To provide an image repository for our partners
- To serve high-quality images – *and* the detailed metadata that makes those images useful for research, management, education, and decision-making
- To serve only images available for most nonprofit purposes – for free
- To offer a broad range of environmental images from multiple regions, when most other galleries focus on species, regions, or topics
- To provide a gateway to Department of Interior agency and other galleries' images
- To share images with other research and education platforms, such as the Global Biodiversity Information Facility.

(Continued on page 8)

The "Media Explorer" tool in the new LIFE will provide multiple means of discovering images, including a geospatial interface as shown in this mockup.

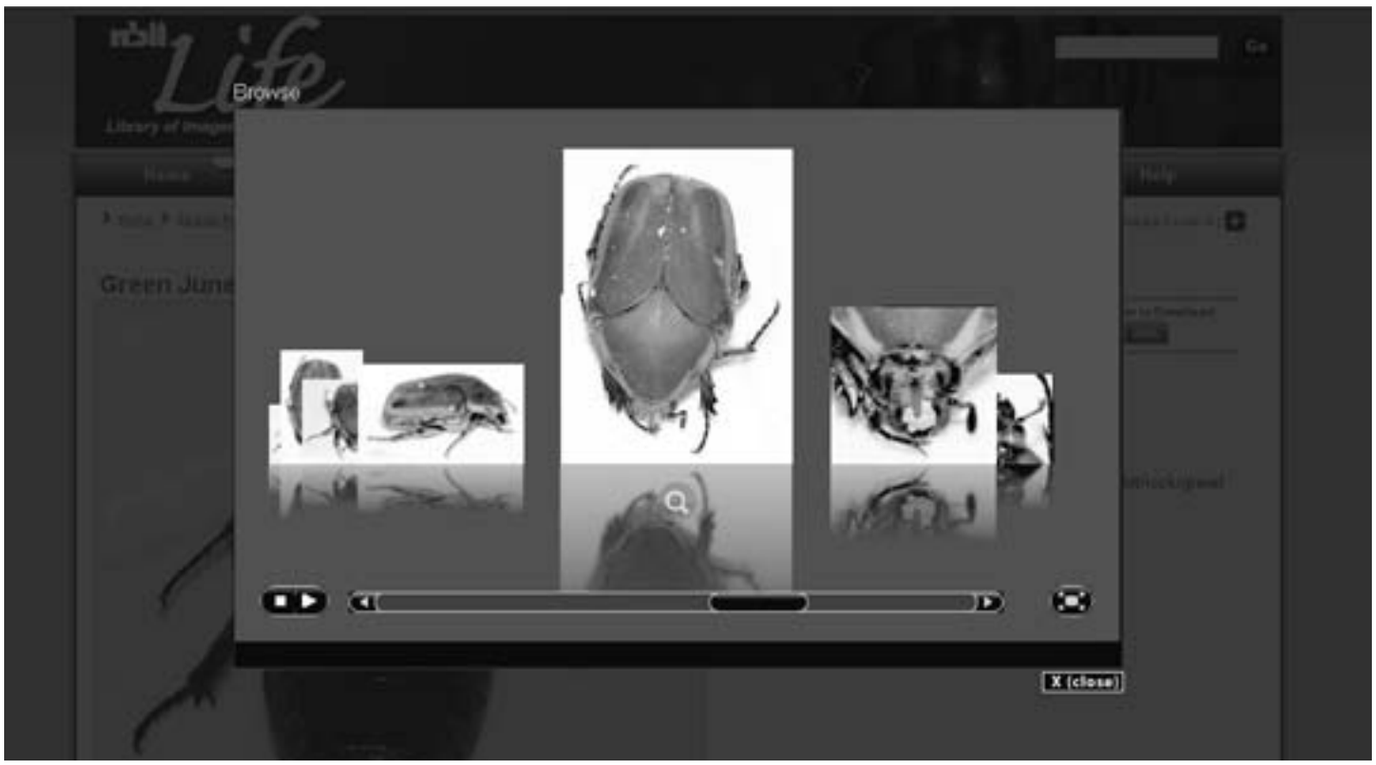
LIFE (continued from page 7)

At first glance, the NBII LIFE will resemble the DIL. Although it will have a different banner at the top and a new logo, it will have the same home page interface, which allows users to easily choose the image categories they want to explore, as well as showcasing Featured Images and other news. But beyond that first page, the functionality increases dramatically. NBII LIFE will provide geospatial and other advanced search capabilities, and users will be able to see with a photograph any other images or resources that are directly related. Add in an increased ability to sort and temporarily store images, and image research and discovery become even easier—a critical point with thousands of photographs being contributed to the library each year.

Behind the scenes, more functionality has been designed and is being implemented. We have created a new database and an extensive metadata schema that supports (when available with an image) geospatial coordinates, elevation, habitat classifications, the sex of the organism, specimen information, Creative Commons licenses, and more. We are also constructing a new cataloging system, called the Media Management Tool (MMT), that will handle the upload and management of large (and small) batches of images at a time. Entire sets of images can have data inputted in advance – or edited afterward. The MMT is now being built and we are looking forward to a means that will allow a cataloger to type in a photographer's name once — instead of 10,000 times!

All in all, our staff and our very dedicated volunteers look forward to a fantastic year. Already the NBII's DIL has made a global name for itself. Out of 203 countries, 164 accessed us last month, including Liechtenstein, the sixth smallest country in the world. The United States leads in users, of course, with our images being used by the U.S. Environmental Protection Agency, the National Park Service, the National Wildlife Federation, National Geographic online, the Illinois Department of Health, the New Hampshire Fish and Game Department, and hundreds more organizations.

The new and improved NBII LIFE will provide greater potential to serve the needs of scientists, resource managers, educators, students, and decision-makers by allowing more images and data to be served, and by providing new resourceful and innovative research tools to locate images. The NBII LIFE is currently undergoing security testing at the USGS Center for Biological Informatics in Denver, and should be online in June. For more details, please contact either Annette Olson, NBII LIFE Lead <alolson@usgs.gov> or Bruce Hunter, NBII's Technical Media Director <bhunter@usgs.gov>.



When viewing an image, a user will be able to use the "Related Media" tool to see other images that are directly related.

Invasive Species Toolbox

Do you have news about an invasive species project you would like to share through this column? Please send any ideas or suggestions for Toolbox columns to <asimpson@usgs.gov> or <esellers@usgs.gov> and cc: the Access *editor <ron_sepic@usgs.gov>.*

Wavyleaf Basketgrass Task Force Forms in Mid-Atlantic

Controlling an invasive species can be very difficult, and both early detection and rapid response are usually required. Wavyleaf basketgrass is a rapidly spreading new invader in the mid-Atlantic area of the United States, and its taxonomy has determined the species to be *Oplismenus hirtellus* ssp. *undulatifolius.* Land managers, invasive species scientists, and interested volunteers have joined forces to combat this species, which can spread quickly because its seed sticks to boots, clothes, and wildlife. The NBII is hosting a new listserv for those who want to collaborate on this effort. To join, send an e-mail with "SUBSCRIBE WLBGTF-L" in the body of the e-mail to <listserv@nbii.gov>.

UNEP Expert of the Day Program Lets Public Ask Questions About the Environment, Including Invasive Species

Two NBII invasive species scientists have recently fielded questions on the United Nations Environment Program Web site <http://www.unep.org/experts>. Michael Browne of the Invasive Species Specialist Group and Annie Simpson of the NBII Invasive Species Information Node have answered questions related to invasive species information management. Michael's answers can be seen at <http://www.unep.org/experts/default.asp?Page=home&ExpertID=404&SessionID=606> and Annie's at <http://www.unep.org/experts/default.asp?Page=home&ExpertID=409&SessionID=621>.

The UNEP program offers access to a wide variety of environmental expertise, and a searchable interface for key words and experts from past sessions can be found at <http://www.unep.org/experts/default.asp?page=previous&l=en>.

Taxonomic Databases Working Group (TDWG) Collaborates With Global Invasive Species Information Network (GISIN)

Donald Hobern, director of TDWG and a member of the GISIN steering team, has asked TDWG members to create a "cook book," i.e., a simple set of instructions for using TDWG's tools to create the GISIN network. Hobern also asked "that they can do so in a way which ensures that related communities can also benefit from the data they share. For example, if GISIN members use the GISIN toolkit to share data, TDWG should make sure that no further steps are required for the Global Biodiversity Information Facility, the Ocean Biogeographic Information System, and others to integrate GISIN occurrence data into their own indexes of species occurrences, or for Encyclopedia of Life, Atlas of Living Australia, and others to integrate GISIN impact status, management status, and dispersal status data into their species profiles." This project should be completed by the end of 2009, and a discussion has begun on the TDWG Wiki at <http://wiki.tdwg.org/twiki/bin/view/InvasiveSpecies/GisinRequirements>. To join the TDWG listserv and participate in this discussion, visit <http://lists.tdwg.org/mailman/listinfo/tdwg>.

(Continued on page 10)

GISIN members work on a data schema at a TDWG meeting, Missouri Botanical Garden, October 2007 (photo by Annie Simpson).

NBII in the News

The NBII is mentioned throughout the year in a variety of venues. Here are a few of the most recent examples:

• Stories have been popping up in a variety of publications about Vivísimo and the new NBII search engine (also described in the pages of *Access* in Fall 2008 and currently). They include *resource shelf*, the daily newsletter with resources of interest to information professionals, educators, and journalists <http://www.resourceshelf.com/2009/04/14/vivisimo-and-us-geological-survey-announce-deal/>, and *EarthTimes*, <http://www.earthtimes.org/articles/show/us-geological-society-selects-vivisimo-as-search-partner,784199.shtml>.

• A photograph of a morel taken by Elizabeth A. Sellers of the NBII Program Office will be used by *The Review* (Ohio) <http://www.reviewonline.com/> and on the Brumbaugh Environmental Science Center Web site <http://www2.muc.edu/Academics/nature_center/>. In addition to contributing her talents as a photographer to the NBII, Liz directs the NBII Pollinators Project <http://www.nbii.gov/portal/community/Communities/Ecological_Topics/Pollinators/>. Her photographs can also be seen in the new NBII Library of Images From the Environment or LIFE <http://life.nbii.gov/>, formerly known as the NBII Digital Image Library (see article on page 7 of this issue).

Oriental bittersweet is a species often targeted by volunteer invasive species networks (photo by Annie Simpson).

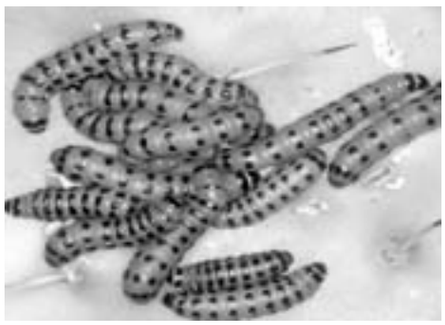
• Success breeds success, in media relations as everywhere else. Annie Simpson, Node Manager of the NBII Invasive Species Information Node, developed a USGS "Science Pick" (mini press release designed to spur media interest) titled "Want to Go Hunting for Invasive Species?" Bob Weinhold of the Society of Environmental Journalists (SEJ) saw it and inquired further. Elizabeth Sellers responded to Bob's inquiry for more information and supplied so much that Bob used it along with other materials to develop an SEJ Tip Sheet <http://www.sej.org/pub/index1.htm>, "Volunteers Pitch in to Identify Invasive Plants and Animals."

• The March 2009 *Southeast Aquatic Resources Partnership Newsletter* identifies the NBII Southern Appalachian Information Node Southeast Collaboration and Partnership Community on the My.NBII.Gov portal as the "resource center" for the Southern Instream Flow Network helping members "share information, documents, ideas, and tools." This group is very actively using the collaboration portal.

Invasive Species Toolbox (continued from page 9)

Butterflies and Moths of North America (BAMONA) Web Site Incorporates Cactus Moth Detection and Monitoring Network Data

As a collaboration of the NBII Invasive Species and Mountain Prairie Nodes and the Pollinators Project, the Cactus Moth Monitoring and Detection Network <http://www.gri.msstate.edu/research/cmdmn/> now provides distribution data on the Cactus Moth to the Butterflies and Moths of North America database <http://www.butterfliesandmoths.org/>. The cactus moth (*Cactoblastis cactorum* Berg.) is a widely used biological control agent of pricklypear cactus in Australia and South Africa. However, cactus moth was detected and became invasive in the Florida Keys in 1989, spreading as far as South Carolina and Alabama. Cactus moth quickly destroys a stand of pricklypear, and is a threat to natural biodiversity, horticulture, and forage in the southwestern United States and Mexico. BAMONA is a searchable database of verified butterfly and moth records in the United States and Mexico. It includes dynamic distribution maps, photographs, species accounts, and checklists for both native and nonnative butterfly and moth species for each U.S. county and Mexican state.



Cactus moth larvae on pricklypear (courtesy John Madsen and Mississippi State University Geosystems Research Institute)

Biodiversity Informatics Conference Set to Begin

The Queen Elizabeth II Conference Centre, London, United Kingdom, will be the setting for the e-Biosphere 09 International Conference on Biodiversity Informatics. From June 1-3, 2009, an exceptional array of speakers and participants will gather to highlight the achievements in biodiversity informatics today as well as discuss strategies for its future.

The conference, which is sponsored by the NBII together with more than a dozen leading biodiversity research institutions, will be a unique opportunity for a wide range of professionals, researchers, and students to help plan the future of the field.

As many *Access* readers already know, biodiversity informatics is a young and rapidly growing field that brings information science and technologies to bear on the data and information generated by the study of organisms, their genes, and their interactions. In doing so, it is creating unprecedented global access to information on biological species and their role in nature.

In addition to helping sponsor the conference financially, the NBII is also preparing white papers on biodiversity informatics and the community of people engaged in it. Bonnie Carroll of the USGS NBII program is an active participant on the e-Biosphere 09 steering committees and is playing a major role in planning and organizing the event.

She said, "June 2009 is an ideal time for this great event. People and nations around the world are becoming increasingly environmentally literate and this administration has made a commitment to environmental

responsibility. Good data is the critical currency to support both literacy and responsibility. E-Biosphere will provide the international forum to both celebrate the advances that have been made in biodiversity informatics and to develop a common sense of the challenges that lay ahead. The special workshop that will follow the main event on Thursday and Friday will take the input from the open meeting to begin to layout a roadmap for the future. We hope to see you there!"

For a review of scheduled events in the conference program as well as a broad range of travel information, just go to <http://e-biosphere09.org>.

IABIN Holds Thematic Network (TN) Working Group, Plans Hemispheric Conference

On March 31 and April 1, 2009, the Inter-American Biodiversity Information Network (IABIN) brought together the disparate institutions leading its data collection and integration efforts throughout the Western Hemisphere. The NBII, which co-chaired this working group, also chairs IABIN.

Participants discussed the state of IABIN's tools development and data holdings, and drafted a detailed work plan to finalize the integration of IABIN's Web sites, information, and tools in advance of IABIN's upcoming Council Meeting, where these resources will be presented to the governments of the region.

This Council Meeting, the sixth since IABIN's founding in 1996, will take place the week of July 13, 2009, in the Dominican Republic. IABIN's Focal Points from its 34 member nations will gather at this meeting to review the progress made by the TNs over the past two years, and continue to undertake outreach and implementation strategies for the tools and resources created under the IABIN/GEF (Global Environment Facility) project. As the last gathering of the Council funded by the IABIN/GEF grant, this meeting will be central to IABIN's mission of bringing together the diverse institutions that warehouse and utilize biodiversity information in the region.

For more information, please contact Ben Wheeler at <bwheeler@usgs.gov>.

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If you would prefer to read the online version, just send an e-mail stating that to <ron_sepic@usgs.gov> and we'll remove your name from the *Access* mailing list. Next, we'll add you to our listserv for notifying *Access* readers when future issues are ready – with a link – so you'll be able to stay up-to-date on NBII developments without adding to your incoming snail mail. It's your call!

Upcoming Events of NBII Interest

2009 International Symposium of the Freshwater Mollusk Conservation Society Baltimore, MD.	April 19–24
65th Annual Fish and Wildlife Conference Lancaster, PA.	April 26–28
Odum Conference 2009 Rensselaerville, NY.	April 30–May 1
Southeast Exotic Pest Plant Council 2009 Annual Symposium, Georgetown, SC.	May 13–15
New York State Geospatial Summit Schenectady, NY.	May 19–20
2009 Tennessee Valley Corridor National Summit, Oak Ridge, TN.	May 27–28
11th Annual Harbor Safety Committee Conference, Tampa, FL.	May 27–29
e-Biosphere 09 International Conference on Biodiversity Informatics, London, United Kingdom.	June 1–3
Texas Coastal Conference Galveston, TX.	June 4–5
2009 American Society of Agricultural and Biological Engineers (ASABE) Annual International Meeting, , Reno, NV.	June 21–24
2009 University Council on Water Resources/The National Institutes for Water Resources Annual Conference, Chicago, IL.	June 7–9
2009 Soil and Water Conservation Society Annual Conference, Dearborn, MI.	July 11–15
2009 ESRI International User Conference San Diego, CA.	June 13–17
Coastal Zone 2009 Boston, MA.	July 19–23
2009 Joint Meeting of the Ichthyologists and the Herpetologists, Portland, OR.	July 22–27

National Biological Information Infrastructure

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